

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

BAKER *et al.*

Appl. No.: 10/551,209

Filed: September 28, 2005

For: **Method of Identifying Optimal  
Variants of Peptide Epitopes**

Confirmation No.: 8322

Art Unit: 1644

Examiner: M. DiBrino

Atty. Docket: 2473.0260001/EKS/PAC

**Reply to Unity of Invention Rejection**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

In reply to the Office Communications dated December 15, 2008 and March 28, 2008, requesting an election of one invention to prosecute in the above-referenced patent application, Applicants hereby provisionally elect (i) identifying from a particular antigen of a particular infectious agent variants of a class I MHC peptide epitope 8-11 amino acid residues in length, each variant comprising primary anchor residues of the same HLA class I binding motif, determining whether each of said variants comprises conserved, semi-conserved or non-conserved non-anchor residues in comparison to each of the remaining variants; and identifying a variant which comprises only conserved non-anchor residues in comparison to at least one remaining variant. Claims 1, 2, 5, 6, 16, 23, 26, 32, 35, and 38 read on such species. This election is made without prejudice to or disclaimer of the other claims or inventions disclosed.

This election is made **with traverse**.

Reconsideration and withdrawal of the Restriction Requirement, and consideration and allowance of all pending claims, are respectfully requested.

At page 3 of the Office Action, the Examiner contends that the species do not relate to a single general inventive concept under PCT Rule 13.1 because they lack the same or corresponding technical features as required under PCT Rule 13.2. In making this contention, the Examiner states that:

DeGroot et al (Immunology and Cell Biology, 2002, 80:225-269) teach comparing the sequence of 8-11-mer peptides across strains of infectious agents such as HIV-1 to identify broadly conserved (across-clade) epitopes (that contain motifs for binding a particular MHC class I molecule, that is, anchor residues, both primary and secondary) and further teach including in the method, the allowance of amino acid substitutions at non-anchor positions (see entire reference).

Office Action at p. 3. Applicants respectfully traverse these contentions.

Even assuming, *arguendo*, that Species (i)-(iv) represent distinct or independent species, Applicants submit that to search and examine the subject matter of Species (i)-(iv) together would not be a serious burden on the Examiner. For example, since the different species represent additional steps useful in the claimed method, searching the step of species (i) would naturally lead to publications which disclose the steps of species (ii)-(iv), thereby making it a simple matter for the Examiner to search and examine the claimed method. Accordingly, it would not be an undue burden for the Examiner to search Species (i)-(iv) together. The M.P.E.P. §803 (Eighth Edition, Rev. August, 2005) states:

If the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions.

Thus, in view of the M.P.E.P. §803, Applicants respectfully request that all claims be searched and examined in the subject application. Therefore, reconsideration

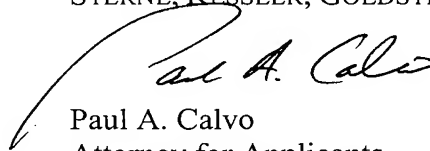
and withdrawal of the Unity of Invention Objection, and consideration and allowance of all pending claims and new claims, are respectfully requested.

Reconsideration and withdrawal of the Requirement for Election of Species, and consideration and allowance of all pending claims, are respectfully requested.

It is believed that extensions of time are not required, beyond those that may otherwise be provided for in accompanying documents. However, in the event that additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required therefor are hereby authorized to be charged to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



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